

Use Attainability Analysis

for

WBID 3232 Pogue Creek

Submitted by Olsson Associates

To Missouri Department of Natural Resources Water Protection Program

On

October 14, 2008

Data Sheet A - Water Body Identification

I. Water Body	/ Information	for water	body	being	surveyed)

Water Body Name (from USGS 7.5' quad): Pogue Cr.

Missouri Water Body Identification (WBID) Number: 3232

8-digit HUC: 11070207

County(ies), Listed Upstream to Downstream: Barry

Upstream Legal Description (from Table H): 32, 24N, 28

Downstream Legal Description (from Table H): Mouth

Number of sites evaluated: 3

List all site numbers, <u>consecutively upstream to downstream</u>:

1, 2, 3

Include a Site Location Map(s). The map must include all requirements detailed in the *Missouri Recreational Use Attainability Analyses: Water Body Survey and Assessment Protocol* (Section IV.D.8.a).

II. Facility Information (list all permitted discharges to this water body segment)

Facility Name(s) and Permit Number(s):

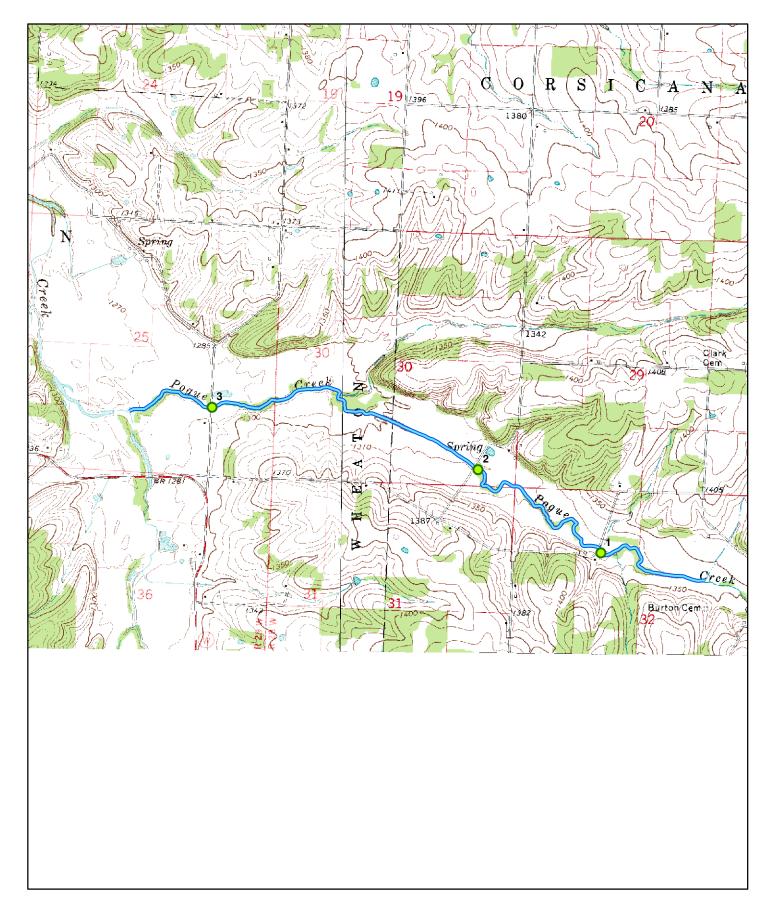
Georges Inc. Cassville Pro MO0108618

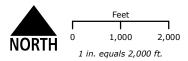
Butterfield WWTF MO 0126292

III. UAA Surveyor (please **PRINT** legibly)

Name of Surveyor: Eric Hertzler	Telephone Number: 417-890-8802
Organization/Employer: Olsson Associates	

Please verify that you have completed all sections of <u>all</u> data sheets, checked all applicable boxes, provided a map (that includes all requirements listed in the *Missouri Recreational Use Attainability Analysies: Water Body Survey and Assessment Protocol*) and that this form is complete.





MISSOURI RECREATIONAL USE ATTAINABILITY ANALYSIS

Stream: Pogue Cr. **WBID:**3232

Map Sheet:1/1 County: Barry



	D # <u>Po</u>	gue Cr. 3232			Date of survey: 0819-08						
Site	#	1									
		Field Data S	Sheets for Re	creational Use St	ream Survey	<u>s</u>					
		Data She		Characterization inpleted for each site)	(Page 1 of 3)						
Date &	Time:	08-19-08	3:12 p.m.	Location Descrip		crossing):					
Stream	Name	: Pogue Cr.		Farm Rd. 2120 I	Bridge crossing						
Current	Weath	ner Conditions: cloudy		Facility Name(s)	Facility Name(s): Georges Inc. Cassville Pro Butterfield WWTF						
Weathe	r Cond	itions for Past 10 days: 2.08	" @ Cassville	Permit Number(Permit Number(s): MO0126292						
	_	ht Conditions at time of this	• '		drought"):						
		; Phase I □; Phase II □; Pha	ase III □; Phase	IV □; Unknown □							
e Loca	tion:	; Phase I □; Phase II □; Pha ORDINATES (UNIVERSAL TR									
e Loca	ntion:		ANSVERSE MER		Horizontal Acc (EPE / FOM /	PDOP)	9 ft. Meters				
e Loca	on CO East	ORDINATES (UNIVERSAL TR	ANSVERSE MER Northing (U	CATOR PROJECTION, 1	Horizontal Ac	PDOP) ² curacy:	9 ft. Meters 2 ft. Meters				
e Locati Locati Site 01	on CO East	ORDINATES (UNIVERSAL TR ing (UTM X): 412393	ANSVERSE MER Northing (U	CATOR PROJECTION, I	Horizontal Acc (EPE / FOM / Horizontal Acc	PDOP) ² curacy:					
e Locati Locati Site 01	East	ORDINATES (UNIVERSAL TR ing (UTM X): 412393	ANSVERSE MER Northing (U	CATOR PROJECTION, I	Horizontal Acc (EPE / FOM / Horizontal Acc	PDOP) 2 curacy: PDOP) 4					
e Locati Site 01 Site 11	East D#	ORDINATES (UNIVERSAL TR ing (UTM X): 412393 ing (UTM X): 412230	Northing (U	CATOR PROJECTION, 1 TM Y): 4068261 TM Y): 4068314	Horizontal Acc (EPE / FOM / Horizontal Acc (EPE / FOM /	PDOP) 2 curacy: PDOP) 4	2 ft. Meters				
e Location Site 01 Site 11 Site 11 Stories: Photo I	East D#	ORDINATES (UNIVERSAL TR ing (UTM X): 412393 ing (UTM X): 412230 Photo Purpose	Northing (U	CATOR PROJECTION, 1 TM Y): 4068261 TM Y): 4068314	Horizontal Acc (EPE / FOM / Horizontal Acc (EPE / FOM /	PDOP) 2 curacy: PDOP) 4	2 ft. Meters				

□ Swimming ☐ Skin diving ☐ SCUBA diving ☐ Tubing ☐ Water skiing ☐ Wind surfing ☐ Kayaking ☐ Boating □ Wading ☐ Rafting ☐ Hunting ☐ Trapping ☐ Fishing X None of the above ☐ Other: Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D- Recreational Use Interview when conducting interviews.)

Photo Purpose

Photo ID#

Photo Purpose

Photo ID#

Photo Purpose

Uses Observed*: (Uses <u>actually observed</u> at the time of survey.)

Data Sheet B Page 1 of 3

Photo ID#

Stream Name & WB	ID # Pogue Cr. 32	32		Date of Surv	ey <u>08-19-08</u>
Site #1					
	Field Data Sh	neets for Recreationa	l Use Stream S	<u>burveys</u>	
	Data Shee	et B – Site Characte	erization (Page ?	2 of 3)	
• 1141			, -	,	
		omote or impede recreational uses			
☐ City/county parks	☐ Playgrounds	☐ MDC conservation la	ınds 🗆 Urban	ı areas X	Rural Residential
☐ Campgrounds	☐ State parks	☐ National forests	□ Nature	e trails \square	Stairs/walkway
☐ Boating accesses	☐ Fence	☐ No trespass sign	☐ Steep	slopes □	Other:
Comments:					
idence of Human U	Se*: (Attach photos a	nd reference in "Photos" section.)	ı		
X Roads	☐ Foot paths/prin		☐ Camping	g Sites	pe swings
□ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES Discha	rge		restock Watering
☐ None of the above	-	Farm Rd. 2120 Bridge @upst		l l	
	_	-			
bstrate*: (These values	should add up to 100%.)				г
% Cobble	80% Gravel	20% Sand	% Silt	% Mud/Clay	% Bedrock
uatic Vegetation*:	(Note amount of vegetation	on or algal growth at the assessme	ent site)		
datio rogetation	(Note unfount of regement	in or argui grown at the abbessions	ant site.)		
ater Characteristics	* (Mark all that apply	\			
0.1	Sewage		X None	☐ Other:	

☐ Gray

☐ Foam

☐ Fine sediments

☐ Milky

X None

X None

☐ Other:

 \square Other:

 \square Solids

□ Scum

Bottom Deposit:

Surface Deposit:

□ Sludge

□ Oil

^{*}This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & WBID # Pogue Cr.	3232	Date of Survey <u>08-19-08</u>
Site #1		

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

mments:	(Please record any additional comments here.)

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Personnel Collecting Data: _	Eric Hertzler

Surveyor's Signature: ______Date of Survey: <u>08-19-08</u>

Organization: Olsson Associates Position: Field Service

Field Data Sheets for Recreational Use Stream Surveys Data Sheet C - Field Survey Results

													Dissol	ved Ox	ygen							
	Stream	Name:		Pogue Cr			Waterbo	dy ID:	323	2		Site #:		1	ı							
	г.: .	1.01	17		0.15	() a :	1.1.		1 114		,					Date:	08-19	9-08	•	Time:	3:15	p.m.
	Estimat	ed Chann	iel Incisi	on:	0.15	(m) (hei	ght betw	een low l	oank width	and wat	er)						Dissolved	Ovvigen:		10.07	(ma/L)	
	GPS Lo	cation - l	Easting (UTM X).	Northing	(UTM Y). Horiz	ontal Acc	curacy Esti	mate (EF	E / PDC	P / FOM	D				Dissolved	Oxygen.		10.07	(mg/L)	
														(meters)			Dissolved	Oxygen:		106.3	(% sat)	
	11	UTM X	:	4122	230	τ	JTM Y:		40683	314		+/-	42 ft.	(meters)								
	Average Stream Width: 5 (meters) Length of Survey Segment: 150 (meters									Specif	ic Cond:		347	(µS/cm)								
		e Stream ermne Le				5		(meters)		_		segment: n width)		150	(meters)	,	Water Temp	aerature:		17 8	(°C)	
	(10 ucio	JIIIIIC LC	ngui oi i	(Cacii)					(2	ox avera	ge sirear	ii widiii)					water reing	crature.		17.0	(C)	
	Fie	ld Staff:				Er	ic Hertz	er / Aust	in Lohkan	р				_								
										Tr.		G	.,									
			ı							Tran	isect Ci	coss-Sec	tion									
)1		02		3		4	05	;		6)7		8	09)		.0		1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deit Buin	0.62	0.05	0.57	0.05	0.34	0.05	0.48	0.54	0.35	0.15	0.72	0.08	0.33	0.17	0.60	0.53	0.59	0.13	0.50	0.10	0.33	0.10
1																						
2	1.24	0.11	1.14	0.13	0.68	0.05	0.96	0.53	0.70	0.22	1.44	0.05	0.66	0.18	1.20	0.54	1.18	0.22	1.00	0.14	0.66	0.21
3	1.86	0.25	1.71	0.21	1.02	0.09	1.44	0.45	1.05	0.21	2.16	0.05	0.99	0.22	1.80	0.50	1.77	0.35	1.50	0.15	0.99	0.23
4	2.48	0.11	2.28	0.27	1.36	0.10	1.92	0.31	1.40	0.40	2.88	0.05	1.32	0.30	2.40	0.57	2.36	0.57	2.00	0.20	1.32	0.20
5	3.10	0.09	2.85	0.09	1.70	0.13	2.40	0.12	1.75	0.60	3.60	0.07	1.65	0.21	3.00	0.53	2.95	0.64	2.50	0.21	1.65	0.28
6	3.72	0.13	3.42	0.05	2.04	0.20	2.88	0.10	2.10	0.84	4.32	0.12	1.98	0.20	3.60	0.47	3.54	0.71	3.00	0.24	1.98	0.24
7	4.34	0.11	3.99	0.05	2.38	0.22	3.36	0.09	2.45	1.00	5.04	0.17	2.31	0.13	4.20	0.40	4.13	0.79	3.50	0.20	2.31	0.17
0	4.96	0.13	4.56	0.05	2.72	0.19	3.84	0.00	2.80	0.77	5.76	0.16	2.64	0.09	4.80	0.25	4.72	0.72	4.00	0.21	2.64	0.05
ð	5.58	0.08	5.13	0.05	3.06	0.20	4.32	0.00	3.15	0.75	6.48	0.13	2.97	0.05	5.40	0.23	5.31	0.63	4.50	0.28	2.97	0.05
9																						
Right Bank	6.20	0.00	5.70	0.00	3.40	0.00	4.80	0.00	3.50	0.00	7.20	0.00	3.30	0.00	6.00	0.00	5.90	0.00	5.00	0.00	3.30	0.00
Feature Type	Ri	ffle	R	iffle	Ri	ffle	Ri	ffle	Poo	ol	Rit	ffle	Ri	ffle	Ri	ffle	Poo	ol	Ri	ffle	Ri	ffle
(riffle, run, or pool)	Transects w	rill he measur	ed heginning	on left descend	ling bank (0 a	denth) and fi	nishing on ri	aht descendir	g bank (0 denth) This widtl	is the wette	d width										

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as \geq 1)

All measurements to be taken to the nearest $0.01\ \mathrm{meter}.$

MAXIMUM 1.00

MEDIAN 0.18

Surveyor's Signature:

Aust They

WBID #_	3232	
Site #	2	

Data Sheet B – Site Characterization (Page 1 of 3)

					(mu	st be coi	mpleted for each site	e)					
			08-19-08 e: Pogue C r	3:53 p.m.				Location Description (e.g., road crossing): Farm Road 1045 Bridge Crossing					
	Current	Current Weather Conditions: Cloudy						Facility Name(s) Georges Inc Cassville Pro Butterfield WWTF:					
	Weather	r Conc	litions for P	ast 10 days: 2.08	" @ Ca	ssville	Permit Numbe	er(s):	MO 0126292				
					•	,	DNR home page for IV □; Unknown □		ought"):				
Si	te Loca			9 4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	4 N/GV								
	Site 01			X): 411544			<u>CATOR PROJECTION</u> TM Y): 4068782	H (1	Iorizontal Accuracy: EPE / FOM / PDOP)	109 ft. Meters			
	Site 11 Easting (UTM X): 411452			Northing (UTM Y): 4068855		TM Y): 4068855		Horizontal Accuracy: (EPE / FOM / PDOP) 123 ft. Meters					
Ph	otos:												
	Photo I	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose			
	3232-2-	-A	Upstream	looking down									
	Photo I	D#	Pho	to Purpose	Photo ID#		Photo Purpo	Photo Purpose		Photo Purpose			
	3232-2-	В	Downstre	am looking up									
	Photo I	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	ese Photo ID#		Photo Purpose			
ا Us	es Obs	erve	d*: (Uses <u>a</u>	actually observed	at the t	ime of s	urvey.)						
	□ Swir	nming	5	☐ Skin diving		□ SC	UBA diving		Tubing	☐ Water skiing			
	□ Wine	d surfi	ng	☐ Kayaking		□ Во	ating		Wading	☐ Rafting			
	□ Hunt			☐ Trapping		☐ Fis			None of the above	☐ Other:			
			de number of i interviews.)	individuals recreating	, photo-de	ocumentat	ion of evidence of recrea	tional 1	uses, etc. Use Data Sheet	D- Recreational Use Interview			

Data Sheet B Revised: December 19, 2007

	Site #2								
		<u>Field Data Sl</u>	heets for Recreat	ional Use	Stream	<u>Surveys</u>			
		Data Shee	et B – Site Char	acterizat	i on (Page	2 of 3)			
Su	rrounding Condition	ons*: (Mark all that pr	omote or impede recreation	nal uses. Attacl	h photos of ev	idence or unusual	items of	interest.)	
	☐ City/county parks ☐ Playgrounds ☐ MDC conservation lands ☐ Urban areas ☐ Rural Residential								
	☐ Campgrounds	☐ State parks	☐ National forests		☐ Natu	re trails		Stairs/walkway	
	☐ Boating accesses	X Fence	☐ No trespass sign	1	☐ Steep	slopes		Other:	
	Comments:						•		
				_	_				
Εv	idence of Human l	Jse*: (Attach photos a	nd reference in "Photos" so	ection.)					
	X Roads	☐ Foot paths/prin	nts Dock/plat	form	☐ Campii	ng Sites	□ Ro	pe swings	
	□ RV / ATV Tracks	☐ Fire pit/ring	□ NPDES D	ischarge	☐ Fishing	g Tackle	□ Liv	vestock Watering	
	☐ None of the above	Comments / Other: J	Bridge (farm road 1045)) @ upstream	end of trans	sect			
		_							
^	L = 4 = 34 a ¥								
Su	bstrate*: (These values		200/ G 1		0/ 0:1/	0/ 1/	1/01	0/ D 1 1	
	% Cobble	80% Gravel	20% Sand		% Silt	% IVIU	d/Clay	% Bedrock	
Αq	uatic Vegetation*:	(Note amount of vegetation	on or algal growth at the as	sessment site.))				
	Moss (very little) on roc	ks.							
Wa	ter Characteristics				T 7				
		☐ Sewage ☐ M	lusky Chen	nical	X None	□ O	ther:		
	Color:	K Clear □ Gı	reen Gray		☐ Milky	\Box O	ther:		

☐ Foam

☐ Fine sediments

X None

X None

 \square Other:

 \square Other:

Bottom Deposit:

Surface Deposit:

□ Sludge

□ Oil

 \square Solids

 \square Scum

Stream Name & WBID #Pogue Cr.

Date of Survey08-19-08

^{*}This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & WBID #Pogue Cr. 3232	_ Date of Survey <u>08-19-08</u>
Site #2	
Field Data Sheets for Recreational Use Stream Surve	vs

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

nments:	(Please record any a	dditional comments he	ere.)		

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Perso	onnel Collecting Data: _	Eric Hertzler		
Surveyor's Signature:	5.1		Date of Survey: <u>08-19-08</u>	
Organization:	Olsson Associates	Position:	Field Service	

Field Data Sheets for Recreational Use Stream Surveys Data Sheet C - Field Survey Results

																		Dissol	ved Ox	ygen		
	Stream 1	Name:		Pogue Cr		-	Waterbo	ody ID:	323	32		Site #:		2		Date:	08-19	9-08		Time:	3.55	n m
	Estimate	ed Chanr	nel Incisi	on:		(m) (hei	ght betw	een low	bank widtl	h and wa	ter)					Date.						p.m.
	GPS Lo	cation - 1	Easting (UTM X),	Northing	(UTM Y	Y), Horiz	ontal Ac	curacy Est	timate (E	PE / PDG	OP / FON	M)				Dissolved	Oxygen:		9.98	(mg/L)	
									4068 4068					(meters)			Dissolved	Oxygen:		105.4	(% sat)	
														(meters)			Specif	ic Cond:		301	(μS/cm)	
	Average	Stream	Width: ength of I	Panch)		5.5		(meters)	L	ength of 20x avera	Survey S	Segment:		150	(meters)	,	Water Temp	aeratura:		17.0	(°C)	
			Ü	,					· ·		ige sireai	ii widiii)					water reinj	ociature.		17.9	(C)	
	Fiel	ld Staff:				Aı	ustin Lol	nkamp / l	Eric Hertzl	er												
										Trai	nsect C	ross-Sec	ction									
	0	1	(02	0	13	0	14	05	5	0	6	0)7	0	8	09	١	1	0	1	1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.56	0.13	0.42	0.10	0.44	0.05	0.66	0.31	0.62	0.05	0.59	0.05	0.76	0.12	0.59	0.10	0.42	0.05	0.44	0.09	0.25	0.05
2	1.12	0.30	0.84	0.22	0.88	0.05	1.32	0.17	1.24	0.14	1.18	0.07	1.52	0.10	1.18	0.12	0.84	0.08	0.88	0.21	0.50	0.27
3	1.68	0.18	1.26	0.37	1.32	0.07	1.98	0.23	1.86	0.12	1.77	0.05	2.28	0.07	1.77	0.24	1.26	0.17	1.32	0.19	0.75	0.23
4	2.24	0.20	1.68	0.33	1.76	0.13	2.64	0.30	2.48	0.23	2.36	0.08	3.04	0.08	2.36	0.27	1.68	0.23	1.76	0.20	1.00	0.40
5	2.80	0.11	2.10	0.32	2.20	0.10	3.30	0.22	3.10	0.25	2.95	0.12	3.80	0.12	2.95	0.33	2.10	0.22	2.20	0.22	1.25	0.32
6	3.36	0.17	2.52	0.27	2.64	0.21	3.96	0.23	3.72	0.32	3.54	0.17	4.56	0.14	3.54	0.42	2.52	0.17	2.64	0.19	1.50	0.25
7	3.92	0.12	2.94	0.24	3.08	0.23	4.62	0.24	4.34	0.37	4.13	0.26	5.32	0.22	4.13	0.30	2.94	0.14	3.08	0.23	1.75	0.16
8	4.48	0.20	3.36	0.25	3.52	0.26	5.28	0.14	4.96	0.41	4.72	0.31	6.08	0.24	4.72	0.21	3.36	0.10	3.52	0.14	2.00	0.11
9	5.04	0.17	3.78	0.05	3.96	0.23	5.94	0.25	5.58	0.39	5.31	0.32	6.84	0.27	5.31	0.12	3.78	0.06	3.96	0.13	2.25	0.10
Right Bank	5.60	0.00	4.20	0.00	4.40	0.00	6.60	0.00	6.20	0.00	5.90	0.00	7.60	0.00	5.90	0.00	4.20	0.00	4.40	0.00	2.50	0.00
Feature Type (riffle, run, or pool)		ffle	Ri	iffle	Ri	ffle	Ri	ffle	Po	ol	Po	ool	Ri	ffle	Ri	ffle	Rif	fle	Ri	ffle	Rit	fle

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as \geq 1)

All measurements to be taken to the nearest 0.01 meter.

MAXIMUM

MEDIAN 0.20

Surveyor's Signature:

Date:

0.42

08-19-08

WBID #_	3232	
Site #	3	

Data Sheet B – Site Characterization (Page 1 of 3)

					(mu	st be coi	mpleted for each site	e)		
			08-19-08 e: Pogue C r	4:36 p.m.			Location Desc Farm Road 10		e.g., road crossing	ng):
	Current	Weatl	her Conditio	ons: Cloudy			Facility Name		ges Inc Cassvilerfield WWTF	le Pro
	Weather	Conc	litions for P	ast 10 days: 2.08'	' @ Ca	ssville	Permit Numbe	er(s): MC	0126292	
		_			•	•	DNR home page for IV □; Unknown □	"drough	t"):	
Si	te Loca			S (UNIVERSAL TRA	ANSVFI	SE MER	CATOR PROJECTION	I IN MET	FRS)	
	Site 01			X): 409908			TTM Y): 4069283	Horiz (EPE	zontal Accuracy / FOM / PDOP	21 ft. Meters
	Site 11	East	ting (UTM	X): 409771	Nor	thing (U	TM Y): 4069221		zontal Accuracy / FOM / PDOP	
Ph	otos:									
	Photo I	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose
	3232-3-	A	Upstream	looking down						
	Photo I	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose
	3232-3-			am looking up	111000		Those Turpo		There is a	11000102000
	Photo I	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose
	3232-3-0	С	Bridge wi	th pool						
Us	es Obs	erve	d*: (Uses <u>a</u>	actually observed	at the t	ime of s	urvey.)			
	□ Swin	nming	5	☐ Skin diving		□ SC	UBA diving	☐ Tub	ing	☐ Water skiing
	□ Wind	d surfi	ng	☐ Kayaking		□ Во	ating	□ Wao	ding	☐ Rafting
	☐ Hunt			☐ Trapping		☐ Fis			ne of the above	☐ Other:
			de number of i interviews.)	individuals recreating,	photo-de	ocumentat	ion of evidence of recreat	tional uses,	etc. Use Data Shee	et D- Recreational Use Interview

Data Sheet B Revised: December 19, 2007

Stream Name & WB	ID # Pogue Cr.	3232		Date of Surv	vey <u>08-19-08</u>
Site #3					
	Field Data Sl	neets for Recreational	Use Stream St	<u>urveys</u>	
	Data Shee	et B – Site Character	ization (Page 2	of 3)	
urrounding Conditio		omote or impede recreational uses.	. •	,	interest)
☐ City/county parks	☐ Playgrounds	□ MDC conservation lar	Î		Rural Residential
☐ Campgrounds	☐ State parks	☐ National forests	□ Nature		Stairs/walkway
☐ Boating accesses	X Fence	☐ No trespass sign	☐ Steep s	slopes	Other:
Comments:	•	· · · · · · · · · · · · · · · · · · ·	<u> </u>	,	
idence of Human U	Se*: (Attach photos ar	nd reference in "Photos" section.)			
X Roads	☐ Foot paths/prin	ts Dock/platform	☐ Camping	g Sites □ Ro	pe swings
□ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES Discharg	ge	Γackle	vestock Watering
☐ None of the above	Comments / Other:		·		
	☐ Bridge crossing @ uj	pstream end of transect. See pl	noto 3232-3-C		
bstrate*: (These values	should add up to 100%)				
% Cobble	80% Gravel	20% Sand	% Silt	% Mud/Clay	% Bedroc
70 C0001C	0070 Graver	2070 Sand	70 Siit	70 IVIUU/Ciay	/0 Bedroe
uatic Vegetation*:	(Note amount of vegetation	on or algal growth at the assessmen	t site.)		
			,		
Moss on rocks					

Water Characteristics*: (Mark all that apply.)

	(11 7			
Odor:	☐ Sewage	☐ Musky	☐ Chemical	X None	☐ Other:
Color:	X Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	□ Solids	☐ Fine sediments	X None	☐ Other:
Surface Deposit:	□ Oil	☐ Scum	X Foam	□ None	☐ Other: Small Amts. Of Foam

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^{*}This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & WBID # Pogue Cr.	3232	Date of Survey <u>08-19-08</u>
Site #3		

Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
Pool	1	20	15	.30	+1

Comments: (Please record any additional comments here.) Pool under farm road 1040 bridge. Over 1 meter in depth. See photo 3232-3-C
Pool under farm road 1040 bridge. Over 1 meter in depth. See photo 3232-3-C
Pool under farm road 1040 bridge. Over 1meter in depth. See photo 3232-3-C
Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.
Printed Names of Personnel Collecting Data: Eric Hertzler
Surveyor's Signature:Date of Survey: <u>08-19-08</u>
Organization: Olsson Associates Position: Field Service

Field Data Sheets for Recreational Use Stream Surveys Data Sheet C - Field Survey Results

														Dissolved Oxygen								
	Stream Name:			Pogue Cr.			Waterbo	ody ID:	3232			Site #:		3		,	Date: 08-19-08			Tr:		
	Estimated Channel Incision: 0.15 (m) (he					(m) (hei	ight between low bank width and water)								Date:	08-19	7-08		Time:	4:41	p.m.	
	, , , , ,																Dissolved Oxygen: 9.45 (mg/L)					
	GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) 1 UTM X: 409908 UTM Y: 4069283 +/- 21 ft. (meters)															Dissolved Oxygen: 111.6 (% sat)						
	01 UTM X: 409903 11 UTM X: 40977			771	71 UTM Y:			4069283 4069221			+/-		(meters)			213501704 OAYgon. 111.0 (76 Sat)						
											150		Specific Cond: 371 (µS/cm)									
	_	verage Stream Width: 6 (meters) Length of Survey Segment: (20x average stream width)									150	(meters)	Water Temperature: 19.2 (°C)									
																		•			. ,	
	Field Staff: Eric Hertzler Austin Lohkamp																					
	Transect Cross-Section																					
	01		02		03		04		05		06		07		0	8	09		10		11	
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.39	0.09	0.47	0.06	0.65	0.12	0.57	0.11	0.48	0.60	0.44	0.59	0.58	0.22	0.38	0.74	1.00	0.40	1.00	0.53	0.76	0.11
2	0.78	0.14	0.94	0.10	1.30	0.20	1.14	0.13	0.96	0.57	0.88	0.58	1.16	0.23	0.76	0.70	2.00	0.32	2.00	0.54	1.52	0.19
3	1.17	0.27	1.41	0.15	1.95	0.75	1.71	0.16	1.44	0.35	1.32	0.46	1.74	0.21	1.14	0.56	3.00	0.30	3.00	0.32	2.28	0.27
4	1.56	0.40	1.88	0.21	2.60	0.20	2.28	0.20	1.92	0.24	1.76	0.32	2.32	0.21	1.52	0.54	4.00	0.06	4.00	0.11	3.04	0.31
5	1.95	0.55	2.35	0.28	3.25	0.17	2.85	0.19	2.40	0.15	2.20	0.23	2.90	0.16	1.90	0.56	5.00	0.05	5.00	0.05	3.80	0.37
6	2.34	0.67	2.82	0.46	3.90	0.12	3.42	0.21	2.88	0.13	2.64	0.12	3.48	0.17	2.28	0.52	6.00	0.13	6.00	0.05	4.56	0.39
7	2.73	0.68	3.29	0.53	4.55	0.16	3.99	0.26	3.36	0.05	3.08	0.07	4.06	0.14	2.66	0.40	7.00	0.17	7.00	0.05	5.32	0.50
,	3.12	0.56	3.76	0.54	5.20	0.21	4.56	0.17	3.84	0.05	3.52	0.05	4.64	0.11	3.04	0.24	8.00	0.14	8.00	0.05	6.08	0.53
8	3.51	0.54	4.23	0.47	5.85	0.31	5.13	0.00	4.32	0.05	3.96	0.05	5.22	0.07	3.42	0.05	9.00	0.23	9.00	0.07	6.84	0.49
9	3.90	0.00	4.70	0.00	6.50	0.00	5.70	0.00	4.80	0.00	4.40	0.00	5.80	0.00	3.80	0.00	10.00	0.00	10.00	0.00	7.60	0.00
Right Bank					0.50	0.00	3.70	0.00														
Feature Type (riffle, run, or pool)	Riffle		Riffle		Run		Run		Riff	Riffle		Riffle		Riffle Ri		ffle	le Riffle		Riffle		Riffle	
	* Transacts will be measured beginning on left deceaning bank (f) depth) and finishing on right deceaning bank (f) depth). This width is the watted width																					

: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as \geq 1)

All measurements to be taken to the nearest 0.01 meter.

MAXIMUM 0.75

MEDIAN 0.18

Surveyor's Signature:

